**Algebra 1 Name:**

**1.5 Do Now Date:**

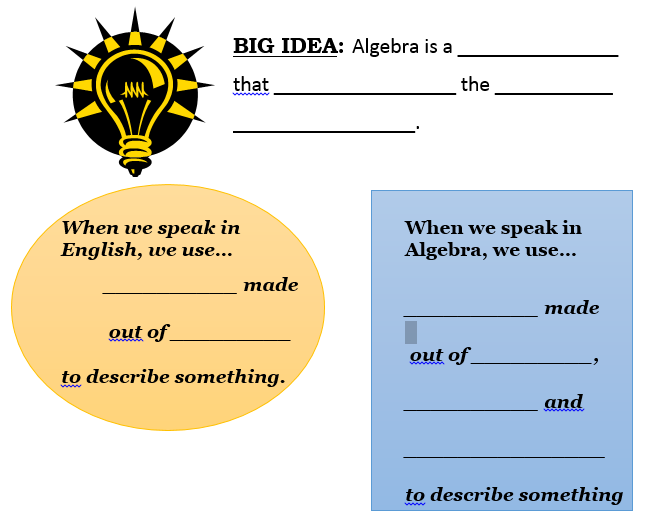
**Do Now**

Evaluate the following expressions for ***a* = 5**, ***b*** = **7**, and ***c* = 2**

1. *b •* (*a – c*)
2. 8*a –* 3*b*
3. *c3 – b + (ac)*

**Algebra 1 Name:**

**1.5 Review Date:**



**Algebra uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to show the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**between two quantities or variables.**

**Algebra 1 Name:**

**1.5 Activity Date:**

**Directions:** Then use the “equations bank” to write an equation that shows the **relationship** between the two variables in the scenario. Then, **define** the variables.

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Variables** | **Relationship Equation** |
| A mechanical pencil costs four times as much as a regular pencil. |  |  |
| The total cost of your trip to the store is $2.05 for every pound of meat you bought. |  |  |
| You use rectangular tiles to build the edge of your new pool. Each tile is 8.75 inches long. What is the perimeter of your pool? |  |  |
| You’re on an African safari! At the watering hole, you notice that there are five times as many antelope as there are elephants. |  |  |
| Your hot water bill this month is for $26.75. What is the cost per gallon? *Hint: How many gallons of water did you use?* |  |  |
| If you run at a constant speed of 10 mph, your distance from home will be 10 times the number of hours you run. |  |  |

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Variables** | **Relationship Equation** |
| |  |  | | --- | --- | | **# of hours of swimming** | **# of calories burned** | | 0.5 | 250 | | 1 | 500 | | 1.5 | 750 | | 2 | 1000 | |  |  |
| |  |  | | --- | --- | | **# of movies rented** | **Total Cost** | | 2 | $7 | | 3 | $10.50 | | 4 | $14 | | 5 | $17.50 | |  |  |
| |  |  | | --- | --- | | **# of minutes run** | **# of miles run** | | 27 | 3 | | 36 | 4 | | 45 | 5 | | 54 | 6 | |  |  |
| |  |  | | --- | --- | | **# of hours worked** | **Total Money Earned** | | 3 | $36 | | 5 | $60 | | 7 | $84 | | 9 | $108 | |  |  |

**Equations Bank**

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**Equations Bank**

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**Algebra 1, Period \_\_\_\_\_ Name:**

**1.5 Review Date:**

**Partner Row Game**

|  |  |  |
| --- | --- | --- |
| **Row 1** | **Row 2** | **Final Answer** |
|  |  |  |
|  |  |  |
| **Evaluate for x= 10 and y = 5**  **4x – 2y** | **Evaluate for x= 8 and y = 2**  **4x – 2y + 2** |  |
|  |  |  |
| **Evaluate for x= 3, y = 7, and c = 2**  **10x – 2y + c2** | **Evaluate for x= 5, y = 4, and c = 1**  **(x – c)2 + y** |  |

**Algebra 1, Period Name:**

**1.5 HW Date:**

**Directions:** Translate each of the following sentences into **variable equations.** Remember to **define your variables!**

